

**Comparison of CDPH Guidelines and CIRM Regulations
Regarding iPSC Research and SCRO Committee Review Requirements**

CDPH Guidelines for HSCR	CIRM Regulations	Differences/ Considerations for Committee Review
§2(e) “Covered stem cell line” means a culture-derived, <u>human pluripotent stem cell population derived from an embryo or product of SCNT</u> that is capable of: 1) sustained propagation in culture; and (2) self-renewal to produce daughter cells with equivalent developmental potential.	§100020(c) “Covered stem cell line” means a culture-derived, <u>human pluripotent stem cell population</u> that is capable of 1) sustained propagation in culture; and (2) self-renewal to produce daughter cells with equivalent developmental potential. This definition <u>includes both embryonic and non-embryonic human stem cell lines</u> regardless of the tissue of origin.	-CDPH revised definition to exclude most research involving iPSC -CIRM retains definition to include iPSC research
§5(a) Research involving the <u>procurement or use of human oocytes</u> as part of human stem cell research...	§100070(a) CIRM-funded research involving the <u>procurement or use of human oocytes or the creation of human gametes</u> may not commence without SCRO Committee review and approval...	-CDPH: “procurement or use of human oocytes” -CIRM includes above and “or the creation of human gametes” • Should Guidelines be revised to match CIRM language? ○ Pro: consistency w/ CIRM ○ Con: would likely fall under iPSC research until materials are planned for use in creating embryos/cell lines/etc. ○ From women’s reproductive health standpoint, procurement of oocytes needs special protections while creating gametes doesn’t raise same concerns
§5(b) Covered research involving <u>use of human embryos</u> ...	§100070(b) CIRM-funded research involving <u>procurement, creation or use of human blastocysts or embryos</u> may not commence without SCRO Committee review and approval...	-CDPH: “use of human embryos” -CIRM: “procurement, creation or use of human blastocysts and embryos” • Should Guidelines be revised to match CIRM language?
§5(c) Covered research with the aim to derive or create a covered stem cell line...		
§5(d) Clinical trials involving the use of human pluripotent cells or cells derived from human pluripotent cells may not commence without SCRO Committee	N/A	• This may have been an oversight when revising the definition of “covered stem cell line” ○ Replace “covered” with “human pluripotent”?

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review and approval in writing... §5(d)(2) Provide assurance that all <u>covered stem cell lines</u> have been acceptably derived. Applies to §5(f)(2) as well.		
§5(f) Research introducing <u>human pluripotent cells or cells differentiated from human pluripotent stem cell lines</u> into non-human animals...may not commence without SCRO Committee review and approval...	§100070(c) CIRM-funded <u>human subjects research</u> ...with the aim to create...blastocysts or embryos, or use a covered stem cell line may not commence without <u>written notification</u> ...	-CIRM includes written notification for CIRM-funded iPSC research to help keep track of collected somatic cells and the informed consent process in case subsequent derived cell lines are used in non-human animals <ul style="list-style-type: none"> Does Committee want to revisit downstream research issues related to informed consent for somatic cells? Currently this issue is not addressed as it falls under iPSC research
§5(f) Research introducing <u>human pluripotent cells or cells differentiated from human pluripotent stem cell lines</u> into non-human animals...may not commence without SCRO Committee review and approval...	§100070(c) CIRM-funded human subjects research... subsequent <u>introduction of derived covered stem cell lines in non-human animals</u> shall be reviewed in accordance with section (e).	- CDPH includes introduction of human pluripotent <i>cells</i> in animals - CIRM includes introduction of covered stem cell <i>lines</i> in animals <ul style="list-style-type: none"> Is there a need to revise Guidelines or does deviation not present any operational difficulties for SCRO Committees?
§6(a)(2)(B) Donors of human gametes or embryos <u>did not receive valuable consideration for participation in research</u> .	§100080(a)(2)(B) For embryos <u>originally created</u> using in vitro fertilization <u>for reproductive purposes</u> and are no longer needed for this purpose, " <u>valuable consideration</u> " <u>does not include payments to original gamete donors</u> in excess of "permissible expenses."	-CDPH allows for cell lines derived from paid gamete donors if donation was initially made for reproductive purposes -CIRM allows for above per recently adopted §100080(a)(2)(B); however CIRM funds cannot be used for payment beyond permissible expenses to gamete donors (§100090(b))
§6(F) Be approved by CIRM in accordance with CCR, Title 17, Section 100081.	§100081 – discusses exemption petition	<ul style="list-style-type: none"> Guidelines could include language that defers to CIRM for the addition of any future acceptably derived lines; however, this may be problematic if CIRM allows lines from other states as CPDH has statute indicating oocytes procured out

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		of state must follow CA statute (e.g. possible conflict with NY)
§7 – refers to deriving new covered stem cell lines	§100090 – uses Prop 71 cut-off date for embryos with regard to oocyte donor consent requirements	<ul style="list-style-type: none"> Guidelines could include a statement encouraging researchers to incorporate informed consent into the research design so as to avoid “retrospective” consent
N/A	§100090(a)(4) – refers to somatic cells being used to develop cells for transplantation into humans (e.g. cord blood); donors need to be consented	<ul style="list-style-type: none"> Guidelines do not address this issue; may not fit scope of Guidelines since iPSC research removed
N/A	§100100(B)(5) – refers to consent from mother of cord blood donor	<ul style="list-style-type: none"> Guidelines do not address this issue; may not fit scope of Guidelines since iPSC research removed